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10/700,995	11/04/2003	Christopher Hahn	003797.00677	5612

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EXAMINER

VU, TUAN A

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/700,995	Applicant(s) HAHN ET AL.	
	Examiner Tuan A. Vu	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/04/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/4/03;3/11/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the application filed 11/04/2003.

Claims 1-23 have been submitted for examination.

Specification

2. The disclosure is objected to because of the following informalities: the disclosing of a table being included in a XML file (See Specifications, Brief Summary, pg. 2; 3rd para, pg. 5; Fig. 2; last para, pg. 6; e.g. '*data file 204 that includes a test case table 206*') is not commensurate with the XML table data in view of its implementation as described in other parts of the Specifications, and does not come in agreement with a more commonly accepted meaning of a table and that of a markup language as understood by one skill in the art, according to which, a markup page does not reasonably contain a table. There is no explicit teaching in the Specs about the term 'table' in terms of defining how the table being included in a XML format (i.e. text being markup having tags) would amount to, i.e. it being provided in some format that would make it particularly distinguishable from a standard table as perceived from general meaning. The Specifications discloses the format of the XML file in Figure 3; and there is only text format gathering of data coming from an external source, e.g. a spreadsheet (see pg. 5, 3rd para); hence the use of language such as mentioned from above needs to be corrected; for the table here appears to be a tabular set of data being formulated into markup text; and the table is not practically a table being included but externally provided tabular data source being integrated inside a markup form.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

Art Unit: 2193

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 7-9, and 20-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites 'data file comprises a table'; and this appears to not being clearly disclosed in the Specifications in order to enable one skill in the art to construe the inclusion of a table inside a markup file, based on the textual format of Figure 3. As set forth above in the language objection in regard to the Specifications, the *table* thus claimed would at best amount to a page of a XML file; or a set of data being converted from a spreadsheet into a markup format. Hence, the claim for reciting a file comprising a table including test cases--each including parameter combinations -- would not be commensurate with the Specifications. One skill in the art, for lack of precise, explicit definition and teaching in the Disclosure concerning the table as recited, will treat this limitation as mere tabular like or tabular related data.

Claims 8-9 are rejected for failing to remedy claim 7.

Claim 20-21 recite 'formatting ... value combinations into a table mark up with a markup language' does not seem to teach on the actual nature of the formatting, in light of the claimed markup language. In light of the Specifications, and the XML file as depicted in Fig. 3-4, one skill in the art would not be able to construe formatting of value combinations so that a table can be implemented within said XML file (disclosed as a file with text format about test case constructs), absent any teaching about the markup language defining the layout or physical implementation of a 2-dimensional table.

Art Unit: 2193

The claimed table would be treated as mere tabular like or related data.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-4, 6-10, 12-14, and 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The Federal Circuit has recently applied the practical application test in determining whether the claimed subject matter is statutory under 35 U.S.C. § 101. The practical application test requires that a “useful, concrete, and tangible result” be accomplished. An “abstract idea” when practically applied is eligible for a patent. As a consequence, an invention, which is eligible for patenting under 35 U.S.C. § 101, is in the “useful arts” when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The test for practical application is thus to determine whether the claimed invention produces a “useful, concrete and tangible result”.

Specifically, claim 1 recites a medium having a data structure comprising a first section having parameters list; a second section having parameter values listed in some order; and a third section having parameter values listed in some order relative to the first parameter list. As a whole, the claim amounts to a product comprising of descriptive software entities stored thereon. The claim fails to reasonably convey interaction between these descriptive entities in order for one skill in the art to be apprised on a possible result being subsequent to this interaction, absent any recital of an action step being taken to realize any interaction between these entities. For failing to show that it can yield a real-world output/outcome, in terms of application results that are deemed concrete, useful and tangible as required by the Practical Application Test, the claim is rejected for leading to a non-statutory subject matter.

Claims 2-4 do not appear to remedying to the above deficiency, and are also rejected.

Claim 6 recites a method comprising extracting value combination from a file; and transmitting the value combinations to a software engine. As a whole, the method amounts to submitting by means of computer execution data to another software engine. Thus, there is insufficient teaching to reasonably convey that the steps of receiving the value combination would lead to some real-world results as perceived from the user that attempt to make use of the claimed method. The internal process of having some computer data being submitted for being processed by software engine does not necessarily convey the realization of a concrete, useful, and tangible outcome, i.e. the above steps are mere internal workings of a computer, and amount to mere intermediate stages of data transmitting or collecting, with no final action making use thereof. The claims 6-10, 12-14, and 16 for not providing action to make use of the data being transmitted to yield a tangible result, amount to non-practical application and are rejected for leading to non-statutory subject matter.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-10, 12-14, and 16-19 are rejected under 35 U.S.C. §102(e) as being anticipated by Mandava et al., USPubN: 2004/0128584 (hereinafter Mandava).

As per claim 1, Mandava discloses a computer-readable medium having thereon a data structure identifying parameter value combinations for use to test a software module (e.g. Test suite - Fig. 5; Fig. 1B-1, *assertion Document, static XML* - Fig. 3A; para 0067 - 0071), the data structure comprising:

(a) a first section that includes a set of testing parameters listed in a parameter order (Table 1, pg. 5; *describes* --para 0068, 0069, 0070 pg. 5 – Note: each enclosing tags reads on parameter listed to define a enclosed element);

(b) a second section that includes a first set of parameter values listed in an order such that each value is positioned in the same order as the corresponding parameter is listed in the parameter order (*defines* --para 0071, 0074, pg. 5 – Note: for each enclosing pair of tags that describes, a definition of such pair of enclosing tags being the value inside the enclosing tag reads on parameter values listed in same order as the list of parameters being listed); and

(c) a third section that includes a second set of parameter values listed an order such that each value is positioned in the same order as the corresponding parameter is listed in the parameter order (e.g. Table 1, pg. 5, <sub-assertions>, bottom L col; <sub-assertion> top R col; pg. 7, pg. 9 – Note: definitions inside each assertion tags are values of the defining tags, and each section of <assertion> being defining tag pairs reads on second or third section including parameter listed in same order as position of corresponding parameter definition).

As per claims 2-3, Mandava discloses wherein the testing parameters are marked up with a markup language; wherein the markup language comprises the extensible markup language (Assertion Document - see pg. 7, 9).

As per claims 4-5, Mandava discloses wherein the first section, second section and third section are elements of a table (e.g. Fig. 3G; para 0120, Fig. 3D-1, 2, 3; Table 5); wherein the table – see Table 5, *chapter* para 0120 -- comprises additional sections that include sets of parameter values (Note: each covered assertion reads on additional *Assertion* sections to be included in test suite for coverage as depicted in Fig. 3D-1, 2, 3).

As per claim 6, Mandava discloses

extracting parameter value combinations from a data file marked up with a markup language (e.g. Fig. 3D-1, 2, 3; Fig. 3F-1, 2);

transmitting the parameter value combinations to a software module test engine (e.g. *Assertions tested by test suite* - Fig. 3G).

As per claim 7, Mandava discloses that the data file comprises a table containing a plurality of test cases and each test case comprises a set of parameter value combinations (refer to claim 4; according to which, the *assertion* based on Chapter and listed in the XML/DTD files being extracted for creation of test suite table so that the test suites generated from the assertions test being extracted to yield a table of test **read on** data file comprising a table of test cases with combinations of parameter value – see value definition of tag <assertion> from claim 1)

As per claims 8-9, Mandava discloses wherein (a) comprises extracting the plurality of test cases from the data file including creating an object from a test case parameter value combination (refer to claim 7)

As per claims 10, 12 and 13, Mandava discloses changing the format of the parameter value combinations before (b), including validating the parameter value combinations by comparing the parameter value combinations to a set of rules (step 606, Fig. 6;

Art Unit: 2193

rule may not applied – para 0119, 0120, pg. 11-12; para 0143-0144, pg. 13); wherein parameter value combinations are validated on demand prior to (b) (see *rules* - para 0119, 0120 in light of the writer of assertion – see para 0112-0113, pg. 11, i.e. demand for a assertion to be validated from the writer and from a user request – see Fig. 2).

As per claims 14, 16, Mandava discloses a medium (see computer – para 0013).

As per claim 17, Mandava discloses a computer-readable medium containing computer-executable components comprising:

an import component that extracts parameter value combinations from a data file marked up with a markup language (e.g. Fig. 3D-1, 2, 3; Fig. 3F-1, 2 – Note: parsing a XML/DTD tag and definition of tag reads on extracting);

a test object creation module that creates an object to test a software module with the parameter value combinations (Fig. 3G).

As per claim 18, Mandava discloses the markup language comprises the extensible markup language (re claim 3).

As per claim 19, Mandava discloses wherein the import module validates the parameter value combinations (refer to claims 12-13).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. §103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2193

10. Claims 11, 15, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandava et al., USPubN: 2004/0128584; further in view of Takahashi, USPubN: 2003/0163802 (hereinafter Takahashi)

As per claim 11, Mandava does not explicitly disclose receiving a table of parameter value combinations at a spreadsheet application; and converting the table to the data file with a spreadsheet plug-in.

But based on table as suggested via Chapter of requirement specification from which to formulate XML/DTD file of assertions in terms of markup parameter definition by Mandava (see Fig. 1B-1, *chapter, table 5* – para 0119, 0121), the table of parameters is suggested. Using a 2-dimensional table of parameters to depict parameters listing and corresponding definition thereof for set up test application was further disclosed via a file being sent to other network services as by Takahashi, wherein a form of marshalling of network transmitted data files (see Takahashi : Fig. 1) by Takahashi server suggests the format of analogous to the markup files by Mandava. Further, Takahashi discloses providing of 2-D table of parameters and definition thereof for a receiving test server to convert the table file into test executable, i.e. a plug-in to convert files (see Takahashi: Figs. 2-6). Hence, it would have been obvious for one skill in the art to implement the chapter and table of specification of Mandava as mentioned above so that they are spreadsheet data -- as these are analogized to the 2D tables of parameter definitions by Takahashi. At the time that the invention was made, the Spreadsheet technology having its internal macro to facilitated dynamic update of data cells was a well-known concept, and one skill in the art would be motivated to implement such spreadsheet as above because based on Takahashi's algorithm to update a temporary file using deletion option (see para 0033, Figs. 6-

Art Unit: 2193

13) in the process of finalizing a file of translated parameter collection, the use of spreadsheet with its macro editing functions would enhance such dynamic update of parameter translation files to support Mandava's assertion markup files in that these can be fine tuned with the Spreadsheet macro options just like Takahashi' temporary file are being dynamically updated using as input the 2D table of parameters

As per claim 15, Mandava discloses a medium (see computer – para 0013) for performing the steps recited in claim 11.

As per claim 20, Mandava discloses generating a table of parameter value combinations, the method comprising:

receiving a plurality of parameter value combinations (e.g. see Fig. 1B-1, *chapter, table 5* – para 0119, 0121); and formatting the plurality of parameter value combinations into a table marked up with a markup language (e.g. Test *suite* - Fig. 5; Fig. 1B-1, *assertion Document, static XML* - Fig. 3A; para 0067 - 0071).

But Mandava does not disclose receiving parameter combinations from a spreadsheet; but this limitation has been addressed in claim 11.

As per claim 21, Mandava wherein elements of the table represent test cases (e.g. Fig. 3A, B, C, D, E, F; Fig. 3G).

Oath/Declaration

11. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

Art Unit: 2193

The oath or declaration is defective because: apparently only one signature is presented in the declaration whereas the Application is filed with 2 inventors. One signature is missing and a new declaration with proper number of signatures is required.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (272) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)272-3719.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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October 2, 2006